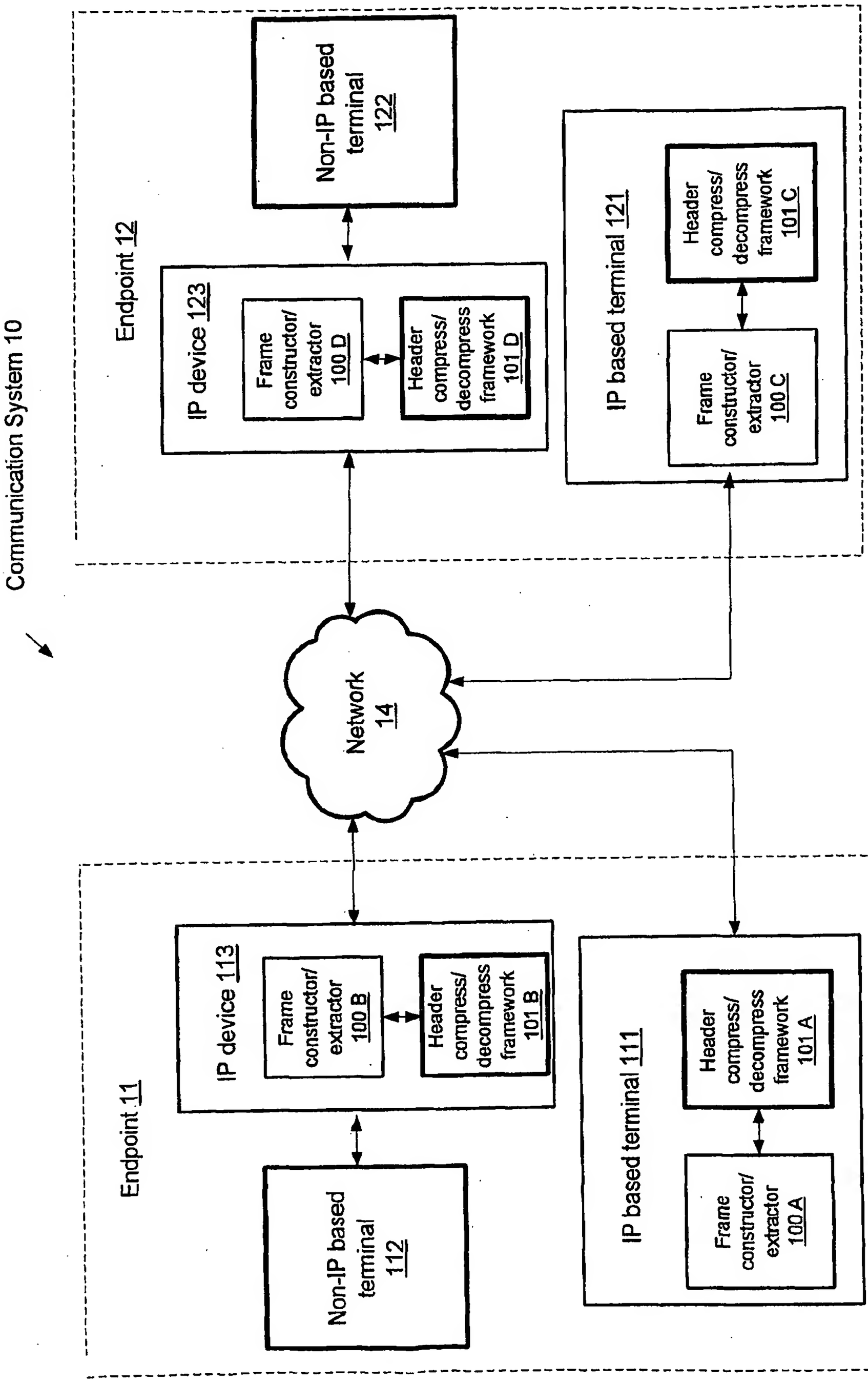
Communication System 10
Endpoint 12
Non-IP based terminal 122
IP device 123
Frame constructor/ extractor 100 D
Header compress/ decompress framework 101 D
IP based terminal 121
Header compress/ decompress framework 101 C
Frame constructor/ extractor 100 C
Network 14
Endpoint 11
IP device 113
Frame constructor/ extractor 100 B
Header compress/ decompress framework 101 B
Non-IP based terminal 112
IP based terminal 111
Header compress/ decompress framework 101 A
Frame constructor/ extractor 100 A

FIG. 1

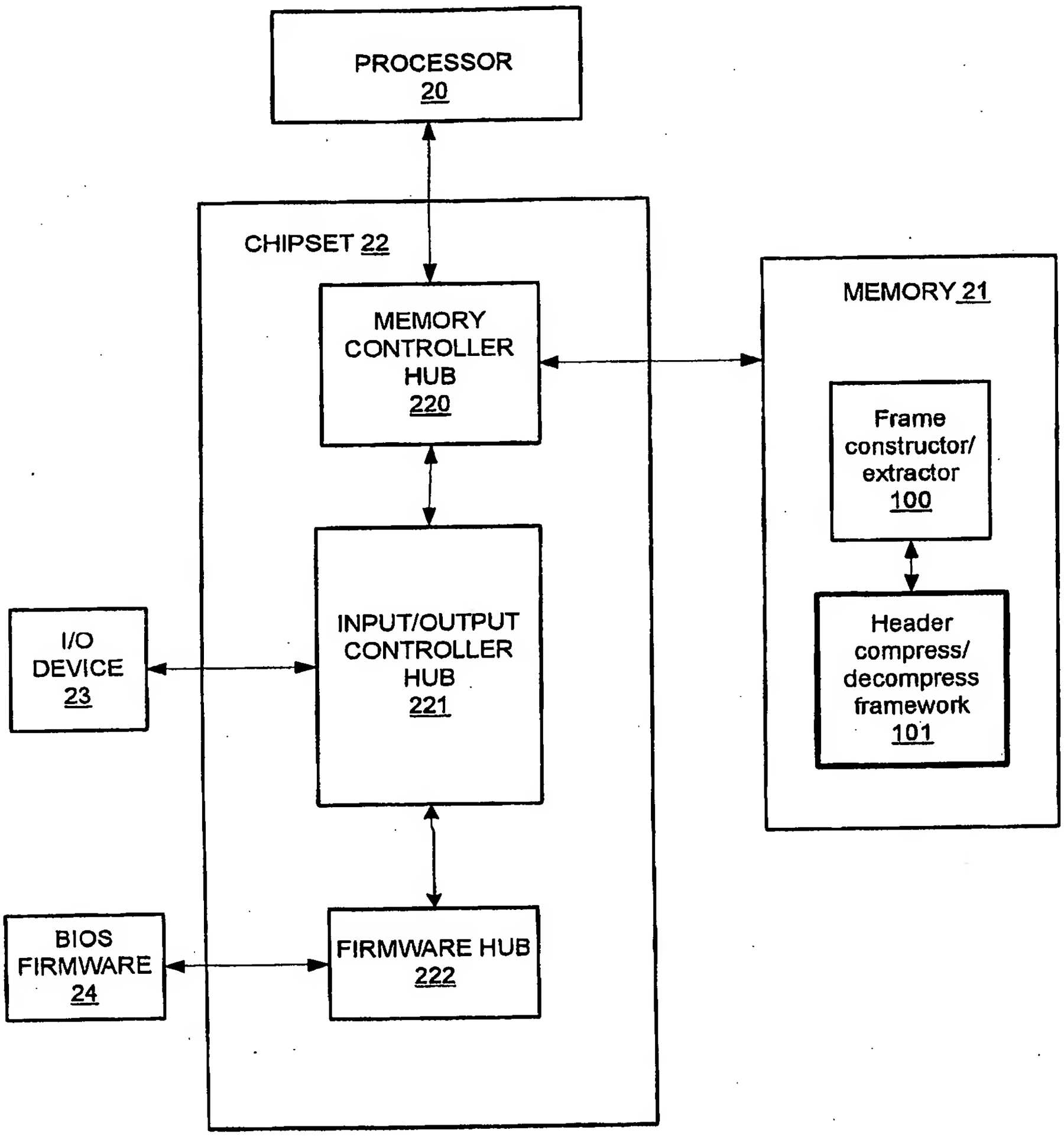
PROCESSOR
20
CHIPSET 22
MEMORY
CONTROLLER
HUB
220
INPUT/OUTPUT
CONTROLLER
HUB
221
FIRMWARE HUB
222
I/O
DEVICE
23
BIOS
FIRMWARE
24
MEMORY 21
Frame
constructor/
extractor
100
Header
compress/
decompress
framework
101

FIG. 2

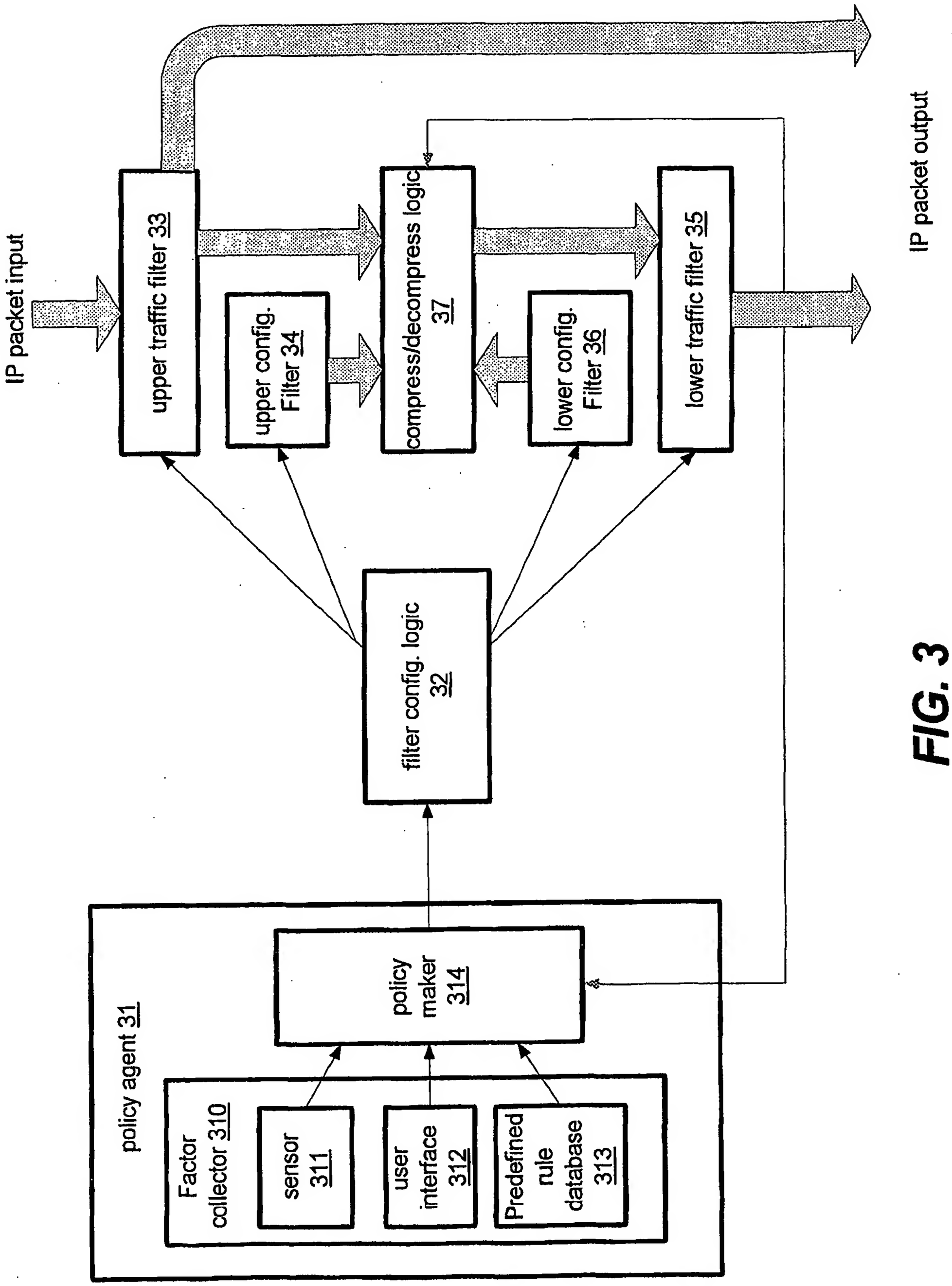
IP packet input
upper traffic filter 33
upper config. Filter 34
compress/decompress logic 37
lower config. Filter 36
lower traffic filter 35
IP packet output
filter config. logic 32
policy agent 31
policy maker 314
Factor collector 310
sensor 311
user interface 312
Predefined rule database 313

FIG. 3

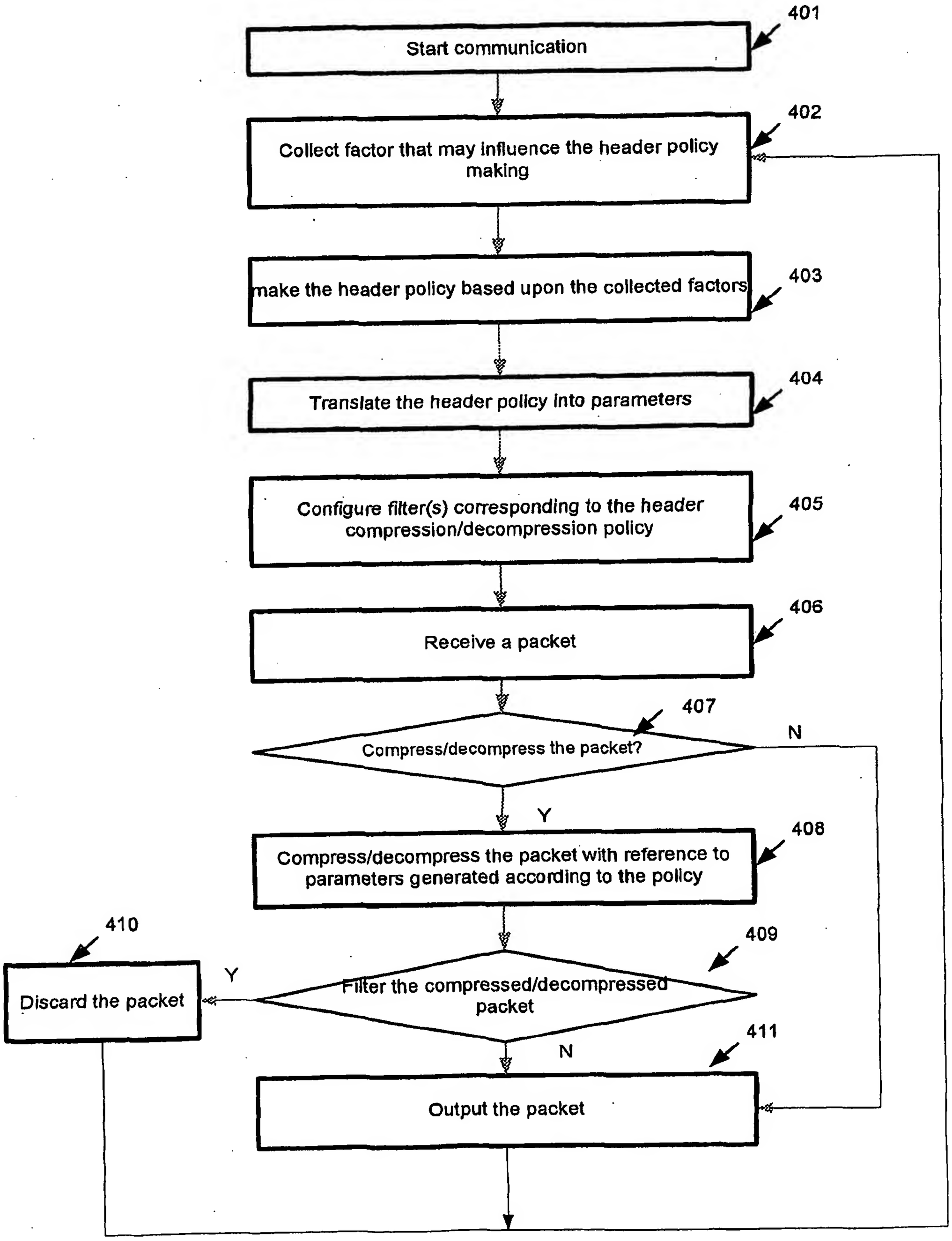
Start communication
401
Collect factor that may influence the header policy making
402
make the header policy based upon the collected factors
403
Translate the header policy into parameters
404
Configure filter(s) corresponding to the header compression/decompression policy
405
Receive a packet
406
Compress/decompress the packet?
407
N
Y
Compress/decompress the packet with reference to parameters generated according to the policy
408
Filter the compressed/decompressed packet
409
Y
Discard the packet
410
N
Output the packet
411

FIG. 4